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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,973	02/11/2004	Tohru Yashiro	2271/71528	3199

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EXAMINER

ANGEBRANDT, MARTIN J

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/776,973

Applicant(s)

YASHIRO ET AL.

Examiner

Martin J. Angebrannt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/18/04 & 7/26/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 14-20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Noguchi et al. EP 1267338.

Noguchi et al. EP 1267338 teaches example A-2 (table 23, page 61), where an azo dye of formula I-2 (page 21) and a mixture of squarylium metal complexes II-2 and II-9 (pages 24-25) which are dissolved in TFP and coated on a grooved polycarbonate DVD substrate 0.6 mm thick to a thickness of 90 nm, a 130 nm gold layer sputtered over this and a 6 micron thick acrylic photopolymer and another 0.6 mm substrate applied and the photopolymer cured and the medium used with a 658 nm laser. (pages 60-61). The recording layer can be coated from various alcohols and other solvents [0295]. The addition of other colorants is disclosed. [0289-0291]. The use of this medium is DVD-R or CD-R is disclosed. [0281-0283].

The examiner holds the position that in the case of example A-2, there is at least some ligand exchange between the squarylium complexes II-2 and II-9, thereby generating the claimed compounds insitu in the coated recording layer of the resulting optical recording medium based upon the exchange in the coating solution or upon prolonged time together in the coated layer.

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The resulting equilibrium will include the squarylium metal complexes II-2 and II-9 and two squarylium metal complexes II-2 or II-9, where one of the ligands has been exchanged with the other.

4. Claims 1-11 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al. EP 1267338, in view of Noguchi et al. EP 1132902 and Kanbe et al. JP 2000-343821 (machine translation attached).

Noguchi et al. EP 1132902 teaches azo dyes and squarylium dyes in optical recording media. The use of a plurality of squarylium compounds is disclosed. [0133]

Kanbe et al. JP 2000-343821 (machine translation attached) teaches that when metal chelates are used, using different ligands increases the solubility and stability of the resultant recording layer. [0010,0015-0016]. This is supported by evidence in the examples [0087-0089].

It would have been obvious to modify the cited example of Noguchi et al. EP 1267338 by using squarylium metal complexes with mixed ligands, similar to the teachings of Kanbe et al. JP 2000-343821 with respect to azo dyes with a reasonable expectation of gleaning the advantages of increased stability over compositions having only squarylium metal complexes with all the ligands being the same and further this is supported by the teaching of Noguchi et al. EP 1132902 concerning the use of a plurality of squarylium compounds.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al. EP 1267338, in view of Noguchi et al. EP 1132902 and Kanbe et al. JP 2000-343821 (machine translation attached), further in view of Noguchi et al. EP 1335357.

Noguchi et al. EP 1335357 teaches optical recording media where a squarylium metal chelate is used together with two formazan metal chelates to extend the spectral response of the

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medium. [0008]. The formazan dyes are shown at [0013-0053]. The ratio of formazan to squarilium dyes may be 10:90 to 50:50 [0094].

In addition to the basis provided above, the examiner holds that it would have been obvious to one skilled in the art to add other dyes to the composition resulting from the combination of Noguchi et al. EP 1267338, with Noguchi et al. EP 1132902 and Kanbe et al. JP 2000-34382, such as the formazan dyes in the amounts taught by Noguchi et al. EP 1335357 to extend the spectral sensitivity of the recording medium as taught by Noguchi et al. EP 1335357 and the direction within Noguchi et al. EP 1267338 to use other dyes at [0289-0291].

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

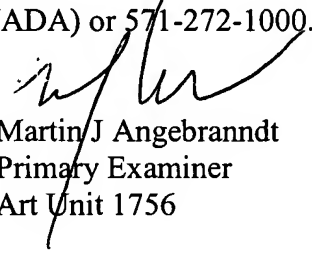
Shoda et al. '114 teach the use of chelating dyes with similar and different ligands.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebrannndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Martin J Angebrannndt
Primary Examiner
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07/27/2006